The problem

According to the Counter Fraud Service of the UK's National Health System, EU expenditure on public healthcare is estimated to be €1 trillion per year. Fraud accounts for almost 3% of public healthcare expenditures in the UK and 3% to 10% of annual expenditures (private and public) in the USA. The UK experience has demonstrated the economic impact of fighting fraud: since the set-up of the Counter Fraud Service, losses due to fraudulent cases fell by about 45%. Use of the **iWebCare** tools, as part of a complete policy for combating fraud could lead to results of a similar magnitude. The importance of fighting fraud becomes more evident in the light of increasing expenditure on health. Demographic projections particularly for the age composition of the population, indicate that by 2050 public expenditure on healthcare in the EU will be between 6% and 7.6% of GDP.

The project

iWebCare, which kicked off in January 2006, is a 3-year €2,3 million project co-financed by the European Commission's IST/FP6 program. The project aims to design and develop a flexible fraud detection web services platform with embedded advanced ICT tools, applying data mining and self-learning algorithms on existing transactions and records, which will be able to support e-government processes by identifying irregular behavior and accurately assessing it.

Overall Objective of the projects are to provide a generic solution to the fraud occurring in eGovernment services.

We focus on parts or whole eGov services where submitted data is processed by the service, i.e.,C2G, B2G and G2G. For this, the following sub-objectives will be set:

- Produce a fraud analysis methodology for determining fraud in eGovernment services, i.e., for an eGov service:
- Understand business process and associated data items at European level, i.e., study how the same business process is implemented in EU countries and identify the dataitems that get processed
- Produce an EU-wide meta-model of the eGov service for both business process and processed data items
- Identify fraud cases in the eGov service with reference to the EU-wide meta-model above
- Express fraud in the business process as an ontology. This will be an ontology of fraudulence cases expressed as rules on processed data items
- Apply and evaluate this methodology in several eGov services, including health care system, customs etc. . .
- Develop a fraud detection system capable of detecting fraud in eGov services expressed as an ontology of fraudulent cases (I.e., rules on processed data items)
- Pilot and evaluate the fraud detection system in eGov services offered in health care
- Explore the fraud analysis methodology and fraud detection system in eGov

The consortium will market the platform's services to various business domains that include fraudulent processes (e.g insurance)

iWebCare